

ATTENDING SANDIA FAMILY DAY tomorrow will be W. E. "Bill" Caldes (2730) and his family. Bill has the longest service record of any employee at Sandia — 16 years. For the first time his family will be visiting inside the Tech Area. The little girl in front is Corinne, in the record row are Chris, Kent, and Kathy. Bill is holding Claire and his wife, Margaret, is at left.

Tour Book to Help Visitors See All Exhibits Family Day

A helpful map and description of points of interest within Sandia Laboratory will be contained in a guidebook to be handed Family Day visitors at the Tech Area entrances.

The guide map marks the en-

Hospitality Centers Ready to Serve All Family Day Guests

"Hospitality" will be the key word on Family Day at two special centers located east of Bldg. 802 and west of Bldg. 880.

Hostesses, identified by their special arm bands, will be at special information booths to answer questions and to handle lost or found articles. After Family Day, any unclaimed articles will be turned over to Sandia Corporation's Lost and Found Service in Bldg. 829, ext. 26149.



Radio contact will be maintained between the Hospitality Centers and Bldg. 840. Through this setup special announcements could be broadcast in the public address system throughout the area. trance and exit gates, building entrances and location of the two Hospitality Centers. Only those buildings numbered on the map are open to visitors.

First aid stations will be located at their usual places in the Tech Area (Bldgs. 840, 892, 880, and 831) and are marked on the map with a cross. In addition, a first aid trailer will be stationed adjacent to the Hospitality Center east of Bldg. 802.

The guidebook includes an introduction by Sandia Corporation's President, J. P. Molnar, in which he expresses the hope that the open house will give families "a better understanding of our work and a fuller appreciation of our assigned responsibilities."

Points of interest listed include: the Development Shops in Bldg. 840; Materials and Standards Laboratory in Bldg. 860: Static Testing in Bldg. 864: Wind Tunnel in Bldg. 865. and Bldg. 880 with its field testing and electronic data processing activities.

For security reasons employees are cautioned not to discuss matters other than those covered in the tour literature.

Family Day to 'Pack 'em in'; Employees Proud of Their Work

When Family Day closes tomorrow it is expected that some 15,-000 members of Sandia employees' families will have visited the Laboratory.

This brings up the question "Why are so many people interested, and why will employees take time to show members of their families where they work?"

It's true that there has always been considerable curiosity about what's behind the fences. With all the current interest in the advancement of our technology, laymen are paying more attention to scientific fields. And it is true there is no other place in the world quite like Sandia Laboratory.

However, it appears that the desire of Sandia employees to show their families where they work goes much deeper. The response to Family Day has led members of the committee planning the event to believe that it is a strong "pide-in-job" that will bring out tomorrow's thousands.

In commenting on the importance of gathering and holding a highly qualified staff, J. P. Molnar, Sandia Corporation President, said in a recent speech: "We need, more than anything else, people who are well trained and who have capabilities in a variety of fields; people who are happy living in the Albuquerque community, people who are convinced that working for Sandia Corporation represents a good lifetime career for them

Describing his job as president of the company, he said, "We have the . . . responsibility of insuring that the Corporation does its job so well that it will have a stable and continuing future." And he continued, "I am not at all concerned that we can and will find new fields to work in. In the last 10 years we have built up an experienced organization with unique capabilities in a variety of fields. We are already starting modest efforts in various nonweapons fields."

This policy and determination on the part of management has contributed to the development of a remarkably stable employee body.

There are now about 700 persons who have been with Sandia for more than 10 years. Another 3600 persons have been here more than five years. Sandia's termination rate is the lowest in its history, less than .7 per cent per month.

"The value of the job" at Sandia is often discussed. As the adage goes, "Proof of the pudding is in the eating." Sandia employees have tried it and like it.

That's why they're bringing their families, by the thousands, to Sandia's Family Day. They are proud of what they have to show.



VOL. II, NO. 8 ALBUQUERQUE, NEW MEXICO

J. A. Barber to Give Paper Before Symposium In Chicago Apr. 22-24

"Environmental Testing to 2,-000° F.," a technical paper by J. A. Barber (1612), will be presented at the 1959 Symposium of the Institute of Environmental Engineers in Chicago April 22-24. The paper describes a project

of the Structural Test Division 1612 to create the environment of re-entry into the atmosphere of a supersonic missile in space.

Electrically heated quartz lamps with tungsten filaments operating in the infra-red region of the spectrum controlled by either a time-temperature programmer or computer programmer achieve more than 2000 degrees Fahrenheit on the test unit in 10 seconds or less. Energy densities of 350 kilowatts per square foot are obtained by this method.

The paper reports that research is in progress to achieve higher energy densities by using graphite plates heated electrically. Temperatures in excess of 6,000° Fahrenheit have been obtained by this method.

D. B. Owen, J. M. Wiesen Authors of Paper in Bell System Technical Journal

The current issued of The Bell System Technical Journal contains an article by D. B. Owen (5125) and J. M. Wiesen (1592). This is the first technical paper originating at Sandia Laboratory to appear in the publication.

The article is entitled "A Method for Computing Bivariate Normal Probabilities." Charts and formulas are presented from which bivariate normal probabilities may be computed. Formulas involving the birariate normal are given for the solution of a problem of handling errors in testing and measuring.

The authors have collaborated on other technical papers published as Sandia Technical Memorandums and have been assisted by George Steck (5511) in these efforts.

R. P. McCann Speaks

R. P. McCann (5223) will be the speaker at a meeting of the Professional Group on Microwave Theory and Technique Tuesday, April 21. He will discuss "Noise in RF Systems."

The meeting will be held in the home of Ray Glass (5223), 1822 Morningside SE, beginning at 8 Mr. Owen has been at Sandia' since 1954 engaged in statistical analysis. He is supervisor of the Statistical Research Division 5125.

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He has been an instructor and research associate at the University of Washington and Purdue University. Mr. Owen earned a BS degree in Mathematics in 1945, Master's degree the following year and his PhD in 1951 from the University of Washington.

He is a member of Phi Beta Kappa, Sigma Xi, Institute of Mathematical Statistics, American Statistical Society and American Mathematical Society.

Mr. Wiesen has been at Sandia since 1951. He is supervisor of the Statistics and Evaluation Division 1592 engaged in the application of statistical methods to weapon reliability.

Mr. Wiesen earned his BS degree in Mathematics in 1949 and his Master's degree in 1951 from Iowa State College. He was a graduate assistant at the college prior to joining the Corporation.

He is a member of the American Society for Quality Control, Institute of Mathematical Statistics, American Statistical Association and is a past president of the Al-

Family Day Program Tomorrow

To Attract 15,000 Sandia Visitors

Tomorrow is the big day.

Some 15,000 Sandia employees, AEC employees and families are expected to be present for Sandia Family Day. Escorting members of their families, employees will show them their own work areas and then visit facilities of five major buildings open to all visitors.

Bldgs. 840, 880, 860, 864 and 865 will feature demonstrations of regular work activities plus special displays and exhibits designed to show the scope of Laboratory activity and the importance of its mission.

Work of the Development Shops will be on display in Bldg. 840 and several large machines will be in operation.

Bldg. 860 will feature demonstrations of environmental test facilities such as shake tables, rain, dust and heat chambers.

Building 864 will feature stress and strain demonstrations and

large static jig displays.

In Bldg. 865 Sandia's transonic wind tunnel will be in operation while full scale parachutes, test units and research rockets will be exhibited.

Field Test equipment and computer facilities of Bldg. 880 be on display in addition to optical instrumentation and an exhibit of telemetry equipment. Two Field Test instrumentation vans will be exhibited at the south side of the building.

In Bldg. 880 cafeteria, Plant Security Department, 4840, will have an exhibit of guard equipment and a security education display.

In all the display and demonstration areas, official hosts and guides will be on hand to answer questions, exhibit equipment and welcome visitors. All hosts, hostesses, guides and lecturers will be wearing Thunderbird armbands. General chairman of the steering committee that planned Sandia Family Day is T. B. Sherwin (4731). Members of the committee headed other working committees that handled the details of preparing the Laboratory for the visitors.

Members and their assignments include R. D. Flaxbart (4570), plant preparation; R. J. Blount (4152), budget; R. H. Schultz (1280), J. J. Miller (5251), Don Williams, Jr. (1611), W. T. Botner (5142), Robert Findlay (2240) and R. A. Richards (1542), tour planning and guides; L. F. Parman (4721), properties and exhibits.

C. E. Runyan (4220), hospitality; J. L. Hickey (4161), traffic; A. B. Metzger (4810), safety; W. W. Troy (4722), security; and T. B. Sherwin handled invitations and related matters such as press tour arrangements.

M. J. Sektnan (4731) is coordinator for Sandia Family Day. p.m.

buquerque Section of ASQC.



J. M. Wiesen (1592) and D. B. Owen (5125) "A Method for Computing Bivarate Normal Probabilities"

APRIL 17, 1959 **Toastmasters Elect**

Editorial **Your Family Day Responsibilities**

Every employee of Sandia Corporation and the Atomic Energy Commission at Sandia has an important stake in the success of our first (and perhaps our last) Family Day program tomorrow. Each of us must serve, not only as a host to our own family group, but to all other guests. The actions of every individual should contribute to the success of the occasion and should not detract from or interfere with anyone else's enjoyment. This means that employees are honor bound to follow the rules set forth in the instructions which accompanied the ticket

applications. Briefly, they are as follows: 1. Come at the time your tickets specify. To do otherwise is unfair

to those assigned to other periods.

2. Bring only members of your immediate household, unless specific advance approval has been obtained for exceptions. Keep small children under control and do not allow them to wander. 3. In moving about the Area, observe normal safety and sanitation practices. Put trash in receptacles. Report any unsafe conditions to hospitality personnel.

4. Do not bring cameras, firearms or pets with you.

5. Urge the women in your family to wear comfortable, low-heeled shoes. Bring strollers for small children if it is not convenient to leave the little ones at home.

6. Don't talk about classified activities. There must be no relaxation of security measures and the questions of your family must be answered carefully to avoid revealing classified information. 7. Obey traffic rules on the Base and be especially careful in en-

tering and leaving the parking lots. Watch for little children.

Family Day is your day. Let's all help to make it a successful and memorable occasion.

Dale Cook Member Of Livermore Advisory Parking Commission

Dale O. Cook (8141) has been appointed to the Livermore Parking Advisory Commission. The eight-man commission was named by the city council and Chamber of Commerce to study the downtown parking problem and to recommend a solution to the council.

A resident of Livermore for only two months, Dale has been with Sandia for eight years. He will meet with the commission semimonthly in their study of the parking situation.

Digital Computer Training

Leigh Hendricks (5126) is presently in Los Angeles attending a training course in the three week Western Regional Educational Center of IBM.

The course includes instruction in large scale digital computers. The group will study the IBM 704 from the point of logical organization of systems with heavy emphasis on solving of problems.

Participants will also study FORTRAN (formula translation) in which the 704 writes its own program. FORTRAN makes possible the translation from the language of the mathematician into the language of the machine.

Fred Daraugh Performs

Several hundred Cubs and Boy Scouts last week watched Master Magician Fred Daraugh (8162-2) and his wife and young son demonstrate that the hand is quicker than the eye. The boys watched the slight of hand expert at the Scout Exposition on the County Fairgrounds at Pleasanton.



Back From Service Another Sandian back after military service is William C. Thomp-



W. C. Thompson

son, who reported to organization 1265.

"Bill" was in the Signal Corps for six months at Fort Monmouth, N. J. Previously he had worked at Sandia for three months.

Flowery Farewell

When Sam Bragg (2721-3) was called into military service this month he remembered his fellow workers by sending them a bouquet of flowers on his termination day.

His co-workers had given a luncheon in Sam's honor the previous day.

Back From Air Force

Robert E. Taylor was welcomed back to organization 1521 recently



R. E. Taylor

after serving two and a half years in the Air Force. He had been working in the division about four

months when called into military service.

The Sandia Toastmasters Club 765 recently elected a slate of new officers, headed by Bob Nelson (4421), president.

Other new office holders are: Joe Danclovic (4621), administrative vice president; Jack Wiesen (1592), educational vice president; Frank West (assigned to 4140), secretary; Bob Sylvester (2553), treasurer, and Le-Moyne Browning (2711), sergeant at arms.

President Nelson announced that the club is presently recruiting for new members.



OSCAR THE SQUIRREL reaches for his regular noon-time handout from Jim Blanchard (8123-3) at Site 300 in the Altamont hills near Livermore. Men who operate the test facility have made pets of several.

New Homes

The problems of new home owners are the main discussion subject during coffee break at Division 1451. Members and their new addresses are: Arthur Engquist, 3608 Glorietta NE; K. D. Hardin, 6004 Rogers NE; Wayne T. Corbett, 10618 Prospect NE; A. F. Hurford, 3612 Espejo NE, and C. I. Votaw, 4501 Delamar NE.

Mr. and Mrs. John Hertweck, Jr., and their two children are making their home at 1500 Espejo St. NE following John's recent transfer to supervise Heavy Equipment Section 4573-3.

Spring is the time to move and Vic Dailey (4254-1) and his family are now settled in their new home at 321 Parsifal NE.

Another new home owner is Gilberto Sandoval (4252-5) and his family. Their address is 8019 San Juan NE.

Career Day Speaker

"Physics as a Career" was discussed by Richard S. Claassen (5150) at a high school career day held April 2 at the Gallup Indian Community Center.

Wedding Anniversaries

Three Sandians are marking wedding anniversaries during the month of April.



NEW OFFICERS for Sandia Toastmasters Club 765 are: back row (L to R) Frank West, LeMoyne Browning, Joe Danclovic, and Jack Wiesen; front row (L to R) Roger Johnson, Robert Nelson and Bob Sylvester. As Assistant Area Governor Mr. Johnson recently presented club's 1958 Speaker of the Year trophy to Robert Nelson.

Weddings and Engagements

Marilyn Franzen (1652-3) and Lt. Donald C. Wunsch will be married June 6. The formal wedding



Miss Franzen

will be held at 2 p.m. in Our Lady of Fatima Catholic Church.

Marilyn has been with Sandia since July 1953. Lt. Wunsch worked at Sandia in 1652-1 the summer of 1957 and in February 1958 joined 1652-3. He is currently on military leave of absence while stationed at Kirtland AFB in the Physics Department of the Research Director.

Now at home at 8313 Copper NE are Donald Lucas and his bride, the former Maxine Drymon (4623-3 assigned to 1451).

The couple was married March 25 in an evening ceremony in the chapel of St. Paul's Lutheran Church.

Maxine has been with the Corporation since May 1957. Her husband is a mechanical engineering student at the University of New Mexico.

Congratulations

Born to:

Mr. and Mrs. William Doyle (4621) a son, Patrick William, on March 16.

Mr. and Mrs. R. A. Dickson (4731) a daughter, Diane, on April 5.

Mr. and Mrs. L. K. Porter (5251) a daughter, Pamela Jill, on March 30.

Mr. and Mrs. Richard R. Shaum (5222) a son, Raymond Warren, on Feb. 22.

Mr. and Mrs. R. E. Knutson ion high school at California's

Escape Injury

Ruth (4962) and Roy (5411) Keyser narrowly escaped serious injury this month. Ruth's mother, Mrs. Edward F. Cass, died near McCammon, Idaho, while en route to her home in Bozeman, Mont., after a visit in Albuquerque.

While en route to Bozeman for the funeral, the Keyser's car was involved in a head-on collission with another vehicle during a ground blizzard, also near Mc-Cammon. Although their autobile was virtually demolished the only injury was bruises incurred by their teen-age daughter.

Speaks to ALOOsters

A technical talk, "Elements of Theory of Orbits of Artificial Earth Satellites," was presented recently by Ralph L. Calvert (5121). The occasion was a meeting of the Gamma ALOOsters luncheon club.

Science Fair Helpers

Helping out at the Albuquerque High School Science Fair this month were J. H. Findlay (5500) and J. W. Pearce (1614). These Sandians judged the Physics entries.

Elected President

Members of the Albuquerque Evening Optimist Club recently elected Allan Fine (1261-1) president. He will take office July 1.

To California Girl's State

Kathy Wolowicz, daughter of Chester Wolowicz (8114), has been named to represent Livermore Un-



Kathy Wolowicz

Frances McKenzie (2220)

Take a Memo, Please

Thoughtlessness is a basic reason for many accidents at work and at home. "I didn't think . . ." are too often the introductory words leading to an explanation of how an accident happened. Think first, then act.

While in the Air Force Bob went through Flight School, then was stationed a year in Alaska.

Women Bowlers Wanted

An invitation has been issued to all women Sandia Laboratory employees or wives of employees to join a new women's bowling league at the Holiday Bowl.

Further information is available from Faye Durham (wife of Howard Durham 1413), telephone AL 6-6284.

Get Well Wishes

Wishes for a speedy recovery are extended to Perm Dwyer (4251) who recently underwent surgery.

Co-workers hope Joe Ozmina (2721-2) will be able to return to work soon after recent surgery.

Co-workers of Millard Taylor (8114-4) wish him a rapid recovery from his illness.

Get well wishes are extended to Dorothy Wiemken (8212-33) who has been ill for the past few weeks. Another employee on the sick list is Mike Lettrich (8211-2), who has been out for several weeks.

John Peterson (2722) and his wife celebrated their 25th wedding anniversary on April 3 by having dinner in the mountains.

Mr. and Mrs. George Chaffee (2711-6) marked their 17th anniversary on April 5.

Another 17th wedding anniversary will be observed on April 25 by Mr. and Mrs. L. E. "Roy" Cole (4744 assigned to 5100).

Sympathy

To Robert A. Knapp (5330) for the death of his father-in-law March 31 in Bridgeport, Ohio.

To Bessie Passmore (4423-1) for the death of her mother on April 2 in Albuquerque.

To Rosalio Silva (4573-1) for the death of his mother-in-law recently in Albuquerque.

To Charles W. Harrison (1456-3) for the recent death of his father in Seattle.

To Benjamin F. Lopez (4251) for the death of his brother on April 1.

To Nathan W. Eytcheson (4224-2) for the death of his mother-inlaw April 1 in Duluth, Minn.

(1262-2) a daughter, Janet Rae, on March 27.

Mr. and Mrs. William J. Patterson, Jr. (2543) a son, Martin Cox, on March 28.

Mr. and Mrs. R. I. Elledge (2631) a daughter, Monica Marian, on April 6

Mr. and Mrs. W. H. Myers (2633) a son, William Andrew, on April 4. Girl's State.

She was chosen by the American Legion Auxiliary civic education program. In mid-June, Kathy, along with several hundred other eligible winners throughout the state of California, will meet at the University of California's Davis campus for extensive citizenship and social science training.



The Sandia Lab News is an official publication of the Sandia Corporation, Albuquerque, N. M Office Bldg. 829, Public Relations Division Editor: Robert S. Gillespie Staff

Starr Donald E. Graham, Cherry L. Burns, June Leonard William A. Jenkins, Livermore Laboratory, Livermore, Calif.



er Association of Nuclear Editors, Border Council of Industrial Edito and affiliated with International Council of Industrial Editors.



THE BUTTON WAS PUSHED, the motor purred, and the Underwood ELECOM recently began its quiet, efficient operation at the Livermore Laboratory. Seated at the Flexowriter is Dale Cook. Judy

Gehring watches him type. Carlos Laguer (5243-1) monitors the operation while Don Easter looks on. All pictured except Carlos are in Division 8141. The ELECOM will open new vistas of study.

Young People Planning Scientific Future Will Find Family Day Exhibits of Interest

Family Day visitors, especially the young engineers and scientists of tomorrow, will be particularly interested in the exhibits in the five buildings open to everyone.

Several displays and demontrations will give an insight into what a mechanical engineer might



Rudy Vinovich (2711) -210 average won trophy-

Rudy Vinovich Wins Bowling Tournament For March of Dimes

Rudy Vinovich (2711) is off on a circuit of bowling tournaments after winning the March of Dimes trophy for high score scratch in competition with 2500 persons.

Bowling left-handed, Rudy ranks second in the nation for high averages in that category, and his 197 average is tops in New

come into contact with during a normal working day.

In Bldg. 860 where environmental testing of components is conducted, one can see shake tables, high altitude, humidity and temperature chambers, and salt and dust chambers. These facilities duplicate environments to which bombs and missiles in use might be subjected.

Static jigs which are used for testing stress and strain on materials can be seen in Bldg. 864, while the Development Shops in 840 house the large machine operations

Field Test displays in Bldg. 880 are the place to go for those interested in electrical engineering. Here there will be telemetry equipment, radar return and instrumentation trailers being exhibited and demonstrated. The electronic fabrication exhibit in Bldg. 840 should also be included in the tour.

The Wind Tunnel facility in Bldg. 865 should be visited by those interested in aerodynamics engineering. They will see a transonic wind tunnel which is used to study the aerodynamic behavior of experimental ballistic casings for weapons and air frames for rockets.

Computers in Bldg. 880, including the 704 and 705 IBM machines, will be most valuable to the mathematician. These mechanical wizards are capable of solving in seconds complex mathematical problems that arise in the research and development of nuclear weapons.

The future physicist will find that all the displays mentioned above would be of interest to him. In addition, the Optical Instrumentation dsplays in Bldg. 880 should be included on his tour.

Hostesses, Hosts Will Greet **Guests at Tech Area Gates**

Tech area entrances during Family Day will be manned by a hostess team which will hand out guide books and maps to visitors coming in and souvenir key rings to those leaving.

Girls serving as hostesses include: Mary Harrison (4654), Marie Syme (1260), Lorris Fox (4653), Jackie Weirick (2530), Maxine Metz (4332). From organization 4623-Rita Smith, Shirley McPeters, Janice Robertson, Mary Harrison, Mary Gallegos, Jane Smith, Jane Holman, Dolores Gravning, Winnie Burnett, Voris Hope, Eleanor Slutts, Pat Goettsche, Amy Gonzalez, Carole Cole, Dorothy Hoecke, Nora Johnson.



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SIGNALS from experimental rocket test vehicle nose section are checked on ground receiving station by John Mitchell (5254-1) as Marvin Barnett (5256) adjusts transmitter. The ground receiving and test vehicles will be included with other Field Test displays to be exhibited in Bldg. 880 on Family Day, Apr. 18.

Traffic Suggestions Offered To Help Family Day Visitors

Employees escorting their families to Sandia Family Day tomorrow have been urged to park their cars in their regular parking lots. Gates 6, 7 and 8 will be open to both entering and exiting traffic while Gate 2 (Bldg. 800 lobby) will be the main reception center for guests and will be for entrance only. Gate 3 (north of Bldg. 800) will be for exit only.

Regular traffic regulations will be in effect on Sandia Base during the day. Any guests driving their own cars without a Base sticker will have to pick up a pass at entrance to Base.

Jackie Jordan, Barbara Ruther-

ford, June Woodley, Doty McKel-

vey, Kendra Atkisson, Patricia

Gutierrez, Vivian Sabisch, Wally

Daily, Susana Navarrette, and

Members of both the Manzano

and Sandia chapters of Toast-

masters have volunteered to as-

sist the hostesses at the gates.

Those participating include: R. S.

Nelson (4421), J. E. Danclovic

(4621), R. S. Heuer (1217), C. L.

L. A. Hanchey (1246), B. P.

Neumon (1217), R. E. Quinlan

(1473), J. F. Durrie (1283), R. E.

Berry (1245), J. H. Lackey (4412),

R. L. Baca (4741), and R. A. Hay-

Hawk (1218), B. S. Hill (1217).

Lucia Vigil.

enga (1217).

The five major buildings open to all visitors will be marked for easy flow of crowds through the display areas. Yellow arrows on the floor will indicate routes to follow through the buildings. Ropes will mark off restricted areas and large "tour" signs will point the way along the intended routes.

Entrance to Bldg. 840 will be through either the north or south entrances and the route through the building will be one-way through the large machine area.

Entrance to Bldg. 860 will be at the northeast door only. Tour route will be one-way south through the environmental test area to the exit at the south end of the building.

Only door open to Bldg. 864 will be on the east side. Visitors will walk directly through the static jig area and exit on the west side.

Visitors to the wind tunnel and aerodynamics exhibition in Bldg. 865 will enter the building from the south end and follow a oneway route through the displays and exit through another door on the south side.

Three separate routes are planned through Bldg. 880 and flow in logical sequence. If visitors enter the northwest corner door they can walk south through the optical instrumentation display to the exit on the southwest corner of the building. There, two large Field Test instrumentation trailers will be on display.

Entering the building again at about the center of the south side, visitors may walk north through the telemetry and radar displays to the analog and digital computer area in Room 36. Exit will be on the north side.

Final leg of the 880 tour can be made by entering at the next door west and moving through the IBM 705 exhibit to exit at the northwest corner of the building. Only governmental vehicles will be allowed inside the Tech Area. Busses will not be in operation. It has been suggested that ladies wear comfortable low-heeled shoes for walking to the various displays.



Mexico

April 11 he was at the Nationals in St. Louis and then went on to the Peterson Classic in Chicago, one of the richest and largest tournaments. The State Tourney in Roswell next week will round out the slate.

Other Sandians participating in the tourneys include E. J. Dadian (4361-3), and Nick Kasnic (4224).

Start Work on Three New Gate Houses

Construction of three new gate houses to replace the obsolete structures located at gates 1, 6 and 7 started last week.

The contract was awarded by the Atomic Energy Commission to G. W. Stuckman Company who submitted the low bid of \$27,024.

Each of the gate houses will be approximately 100 sq. ft. and the contract includes associated facilities such as plumbing and fencing.

Estimated date for completion of the project is June 30.

SANDIA FAMILY DAY PLANNERS take time out Development Shops to pose for the photographer from a final inspection tour of displays in the

informally on giant tracking telescopes in Bldg. 840.

Seek Bids on Electrical Work in Technical Area

Invitations to bid were issued to contractors last week by the Atomic Energy Commission for the installation of a government furnished transformer in Sandia's Tech Area I.

A 3750/4687 AVA three phase transformer complete with a 44 KV primary transmission line and underground secondary feeders will be installed.

Bids will be opened about April 30. Work is to be completed within 90 days after the successful contractor receives notice to proceed. Estimated cost range for the project is \$25,000 to \$35,000.

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OPTICAL REDUCTION printer of the Motion Picture Division 4765 is operated by Gerald Cobb. The machine reduces 35mm film to 16mm. In the background is a double sound-head black and white printer which simultaneously reproduces sound track and film.



RECORDING STUDIO AND THEATRE of the Motion Picture Division 4765 is shown here. At left, Morris Engle operates the console and checks script while Eldon Fratt reads movie narration.

Tech Library Marks National Week with Family Day Exhibit

In recognition of the National Library Week, the Corporation Technical Library in Bldg. 802 will remain open during Family Day on April 18.

With over 30,000 technical and management books, 850 periodicals and 65,000 technical reports, the Library and its several branches is one of the largest industrial libraries in the country.

The Corporation Library thus joins with over 5.000 communities and 28 national service, professional, and industrial organizations to stimulate interest in library use.

The Library staff, most of whom belong to such professional library organizations as the New Mexico Library Association and the Special Libraries Association.

E. M. Shonka New Head of Sandia's Auditing Dep't

E. M. Shonka became Manager of Auditing Department 4120 on

April 6 replacing F. C. Rupp who returned to Western Electric Company, New York. Formerly Mr.

E. M. Shonka Field Auditor, with Western Electric in New York since August 1948. He started working for Western Electric at Hawthorne in 1928 as a Raw Material Clerk in the Material Order Department. After transfer to New York two years later he was in Commercial Development Engi-



NEW AUTOMATIC COLOR PROCESSING machine of the Movie Division is operated by Wayne Hancock, left, while Jim Karo checks tension of the

film moving through the tanks of the machine. Once controls are set for the machine, its operation is automatic as it processes 35 ft. of film a minute.

Motion Picture Division Now 'Home' at Sandia Laboratory

The last occupants of the old "West Lab" have now settled down in a new wing of Bldg. 863. The Motion Picture Division, 4765, started its move in February and now has its new laboratory almost 100 per cent in operation.

"Most of the old equipment was moved," Jim Karo, Division Supervisor, says, "and it took a little time to get set up again and get back in business. In addition," Jim continues, "we had several large pieces of new equipment that had to be installed and tested."

Jim is referring to the new automatic color film processing machine that turns out 35 feet of both 16 and 35mm processed color film per minute.

The exposed film is inserted in the machine from the darkroom entry and it moves automatically in long strips through the several processes of development and drying.

The chemical tanks are automatically filtered and replenished. although a fresh supply of chemicals has to be always in readiness for pumping into the large storage tanks.

Other new equipment includes a simultaneous sound track and film editor, a 16mm printer, three new movie cameras, a reduction printer that converts 35mm to 16mm, an animation stand and a "hot title" press.

"We photograph mostly surging currents through electrical circuits as part of military training "although films Jim says have done animated drawings in the past with the drawings provided by Technical Art Division, 4763."

The Motion Picture Division each month produces about one and a half training and documentary films for the Military Liaison organization, 5300. This includes photography, processing, editing, recording narration and sound effects and providing finished prints.

"The bulk of our work," Jim says, "is processing data film shot by field test photographers of the Optical Measurements Division, 5216, and the Field Operations Division, 5214."

About 50,000 ft. of data film is processed by the lab each month. In addition, the Applied Sciences Division, 5131, has some film each month for processing and the Motion Picture Division plans to shoot several movies for the Area III Facilities Division, 1613.

The photographers of the division-Bob Matthews, Robert Lusby, Morris Engle and Eldon Fratt-perform many tasks in the production of films. In addition to photography, they handle the recording of the sound track, edit the film and make the titles with the aid of the new mechanical hot title press. This machine uses heat to print colored letters on "cells" of acetate which are subsequently photographed on the animation stand to provide titles and text for the movies.

Photographers of the division have covered assignments throughout the U.S. and overseasin the production of documentary films. Their assignments have varied from production methodsmovies to documentaries of weapons testing.

"We feel closer to home now," Jim says, remembering several months back when his was theonly operation functioning in the West Lab, "and we're back in business."



Movie Division, Dee Fenstermacher, checks movie script against recorded narration. The machine is a 16mm simultaneous sound and film editor.



Shonka had been Assistant Superintendent,

will recognize the day with a special exhibit designed to interest young people in the library vocation. Ruth Farley and Ida Gutierrez are members of the Special Library Association's recruiting committee.

Albuquerque Area **AIIE Members Meet**

Two representatives of CG Electronics will be the featured speakers of a two-part meeting of the Albuquerque Area Chapter of the American Institute of Industrial Engineers Monday, April 20.

John Tillman, CG Electronics plant manager, will discuss "The Organization and Manufacturing Aspects of CG Electronics."

Paul Benewitz, manager of CG's Telemetry Development Department, will discuss "Technical Engineering Phases of CG Electronics with Particular Emphasis on Retransmission."

First part of the meeting will begin at 6:45 p.m. with dinner at the Mint Bar, 212 Third St. NW.

Methods, Cashier and later Field Auditing supervisor.

Albuquerque Newsmen, Executives to Be Guests at Sandia Lab This Week

Two press tours have been arranged in conjunction with Sandia's Family Day program. Executives of local news media press, radio and television-will be given a preview tour of the Laboratory at 3 p.m. this afternoon and another conducted tour for the "working press" is scheduled for 1 p.m. tomorrow.

Representatives of top management will meet with the news executives at the Base Theater at 2:45 p.m. today for a briefing on Sandia's responsibilities in the weapons program. Mr. Molnar will greet the visitors and preside at a brief question and answer period. They will see "The Sandia Story," a 30-minute film on our technical activities, and then visit selected buildings in Tech Area I where

demonstrations are scheduled for Family Day.

The press tour tomorrow will include the Class "A" buildings and other selected points of interest. Reporters will be given information packets of photographs and background information for news articles. Special photographic coverage will be provided by official photographers as needed.

A brief documentary film report on Family Day will be "shot" during the day as the thousands of visitors throng Tech Area I. The film will serve as a historical record of the occasion and a guide to other installations which may be planning similar functions. Motion Picture Division, 4765, will be doing the photography, with the Public Relations Divisions, 4731 coordinating the production.



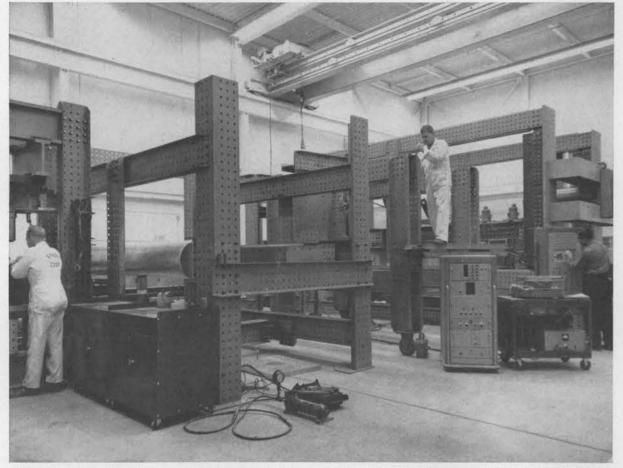
NEW ANIMATION STAND is operated by Bob Matthews, left, and Robert Lusby at the camera. The machine films titles, animated circuits and cartoons. One frame is photographed at a time.

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FAMILY DAY will be a real affair for the four Becker brothers and their families who are (L to R): Ed (4221), Charles (4221), Bob (4253) and Jim

(2222). Together they have a combined service record of almost 40 years. In addition, Bob's wife, Geraldine, has worked in Org. 4423 for two years.



NO GIANT ERECTOR SET, this static test facility is used to apply stresses and strains on weapons components in Bldg. 864 to simulate conditions which may be encountered in actual use. Shown

here preparing a test are (L to R): Harry Warrick, Andy Imrisek and Juan Mata, all of 1612. The building will be open to visitors on Family Day, April 18, when Sandia hosts employees' families.

Supervisory Appointments

WILLIAM E. CALDES to Manager of Inspection Control De-

partment 2730. "Bill" has been a division. supervisor since Sandia Corporation came into being, first in Electrical Inspection. for 10 years in Quality

Assurance and since last October in Inspection Control.

In 1943 he joined the Manhattan Engineering project at Los Alamos in the Physics Research Division, working with the Lawrence cyclotron.

Three years later when Los Alamos established facilities at Sandia Base, Bill became a group leader in charge of Telemetering (Group Z-8). His job changed to Division Supervisor, Electrical Inspection, in 1948.

He has the distinction of being Sandia's "oldest" employee, being the first to receive a 15-year service award last year. Credit is allowed for service at Los Alamos in cases like his.

Bill attended Princeton University, then worked for a year in electronics at Princeton's Palmer Physics Lab.

He is a Senior Member of the Institute of Radio Engineers and is a member of the American Society for Quality Control.

Welcome

Newcomers March 30-April 10

Albuquerque	1000
lim C. Beller	4574
*Alice T. Boggs	4023
Lester G. Harris	2123
*Henry L. Hawk, Jr.	5231
Maxine K. Jackson	4623-4
Kenneth E. Johnson	4232
William L. McCombe	4132
Sharron Lawrence	4623-4
Helen I. Longbrake	4021
*Marie S. Luna	4315
Walter H. Mandleco	5132
*Dorothy C. Newton	4721
JoAnn G. Romero	4623
Norma H. Schaad	4623
H. Suzanne Shelden	4623
Lloyd R. Thompson	4574
Linda L. Wrhel	2562
California	
Jerry A. Wackerly, Livermore	8232-1
Chrisanthe G. Widger	
Castro Valley	8212-3
Robert P. Craig, Walnut Creek	8142-2
Judith A. Lerner, Oakland	8233-1
Illinois	
Alfred F. Chesrow, Jr., Skokie	5214
Michigan	
Richard M. Webster, Menominee	4253
North Carolina	
James A. McDonald, Ashville	1611
Texas	
Hobert W. Gilbert, Granbury	1611
Washington	
Frank T. Beers, Seattle	8141-1
Bruce A. Honey, Ephrata	8121-2
* Denotes Rehired	
Returned from Leave	
Mildred A. Bussey, Albuquerque . William C. Thompson,	4623
William C. Thompson,	
Fort Monmouth, N. J.	1265
Dorothy N. Case, Albuquerque Fabiola Sandoval, Albuquerque	4334
Fabiola Sandoval, Albuquerque	4132
Hazel O. Whitlock, Albuquerque	4623-1
Rosalie Martinez, Albuquerque .	42

JESSIE H. BURNS to supervisor of the Data Center and Data Re-

duction Center. 8121-3, Liver-Laboramore tory.

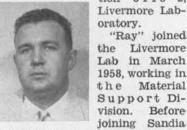
An employee of the Corporation for nearly 11 years, he transferred from the Field Test Division in

to the Livermore Albuquerque Laboratory last May.

Jessie came to Sandia after graduating from the University of New Mexico in 1948 with a BS degree in Electrical Engineering.

He is a veteran of four years in the Navy as a line officer during World War II.

RAYMOND E. GOTT to supervisor of the Organic Materials Section 8115-2.



"Ray" joined the Livermore Lab in March 1958, working in the Material Support Division. Before joining Sandia

he worked for the Hanford Atomic Products Operation in Richland, Wash., as a process engineer. He previously was with the University of California Engineering Field Station at Richmond, Calif., for several years and before that was briefly with an Oakland chemical firm.

A graduate of the University of Wyoming in 1952, with a BS in General Engineering, Ray received his Master's degree in Chemical Engineering at the University of California in 1955.

He is a veteran of two years in the Navy.

Livermore Lab Men **On Modesto College Advisory Committee**

Two employees of the Livermore Laboratory are members of an Industry Advisory Committee set up to help Modesto Junior College plan a drafting technology curriculum for the school.

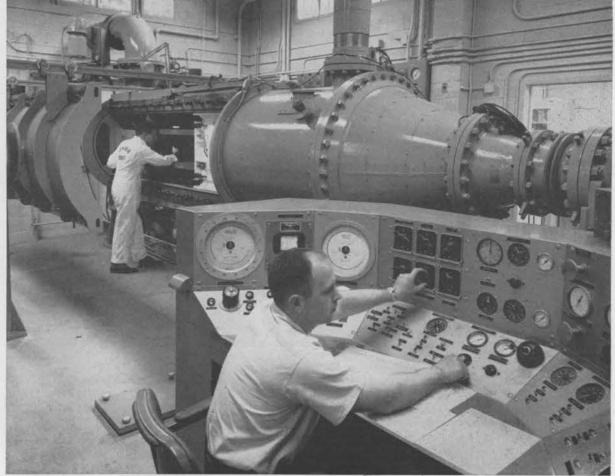
They are C. S. Wolowicz (8114) and M. A. Pound (8212-1).

The two Sandians will tap their experience to advise the school about what technical courses they feel are most desirable for students preparing a career in drafting.

At present, the two men are commenting on a proposed drafting curriculum for next fall.

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UNIFORM SIGNS bearing official thunderbird design will be used throughout Tech Area I during Family Day to identify equipment or facilities. Kenneth A. Bixler (5243-4) fastens lettered sign onto Automated Data System, developed by Sandia's organization 1500. The complex machine converts punched paper tape to magnetic tape for use in the IBM 704 or 705. Display is in room 36 of Bldg. 880.

TRANSONIC WIND TUNNEL in Bldg. 865 will be among exhibits to be shown by the Experimental Aerodynamics Division (5142) on Family Day, Apr. 18. Shown here are John Arnold, left, who is placing a test specimen in the tunnel, and Don Mac-Kenzie, who is operating the control panel. PAGE SIX

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ELBOW DEEP in souvenir key chains and Thunderbird emblems is Faye Rose (5216). This is actually only half of the items which have been produced for distribution during Family Day.

Printed Circuitry Technique Used In Making Family Day Souvenirs

Guaranteed to be popular souvenirs of Family Day are copper colored key chains with a pentagonal shield bearing Sandia's Thunderbird symbol which will be distributed as employees and visitors leave the Tech Area.

However, the fob is more than just a decoration. It is an example of printed circuitry in which Sandia has pioneered many new techniques and processes.

The medallion is made of plastic with a 1/1000th-inch coating of copper.

Since Art Cordova's Printed Circuitry Section (4233-2) customarily works only on circuits for prototype models, this was the first time the organization had tackled a job of this magnitude. The process involved blowing up a tiny matchcover size emblem to a 12" x 14" negative. After the lettering was placed in the center of

the shield it was rephotographed many times until a master negative was created, making it possible to turn out 304 emblems at once

After the pattern was "burned in" on both sides of the plastic base and the copper etched away in a chloride bath, the large sheets of emblems were sent to the Sheet Metal Section (4224-3) for cutting into long strips.

Next stop was Jim Hay's Project Section B (4253-2) where a die was made, and medallions were punched out.

Perhaps the most tedious job was the final step. Employees of H. J. Samuelson's Processing Section (2241-2) had to string the key chains through a prepunched hole in the emblem.

The medallions, incidentally, have a thin plastic coating so the copper will not tarnish and the corners are rounded.

sound originating in the room. Using this "no-echo" chamber, a known amount of sound would produce a precisely measurable amount of damage in a test unit. The exact degree to which a component could withstand vibration

Sound levels produced by the facility will reach the 170 db (decibels) region which would easily destroy hearing. A baffle system of Fiberglas wedges in a stack arrangement will absorb most of the sound prior to "exhausting" it outside the building. It will be inaudible in Area

Sandia Employees at Livermore See LRL Site 300 This Week

ployees and their families visited the AEC's Site 300 Sunday, April 12, as guests of the Lawrence Ra-

New Test Equipment Will Simulate Noise To Be Encountered in Supersonic Flights

Construction will start soon in Area III on Sandia Laboratory's unique "Rocket Roar" test facility. It is designed to simulate the environment of components inside rockets or jets in sustained supersonic filght. The new acoustic test facility will be another addition to the large environmental test facilities of the Test Laboratory Department 1610.

Project engineer for the facility is Charles W. Remaley (1613). He designed the special equipment and instrumentation for the facility and worked with Plant Engineering Department 4540 in preparing preliminary lay-out and specifications.

Architect - Engineering contract for the project was awarded to James Liberty. Underwood-Testman Company of Albuquerque was awarded the construction contract on a low bid of \$84,609. Both contracts were awarded by the AEC.

The building will contain approximately 1700 sq. ft. and will be of reinforced concrete and concrete masonry construction and will include a control room, testing chamber, equipment room and air lock.

Called Phase I, the current construction will house a reverberant testing chamber which will produce an environment of thunderous sound vibration equal to that surrounding a component inside a missile at launching.

Plans for Fiscal '60

Phase II, planned for fiscal year '60, will house a huge Plane Wave tube which will simulate high intensity sound found outside a missile or supersonic carrier. Walls of the tube will be fabricated from 12-inch thick concrete.

Also planned for Phase II is an anechoic room which will ap-proach a "pure" sound-absorbing environment. The walls of the chamber will be wedges of Fiberglas that will absorb all of the

from severe noise could be determined.

Many Livermore Laboratory em-

diation Laboratory.

Prior to installation in Area III. the reverberant chamber will be completely assembled and its operation checked in Bldg. 849 by June 15. The chamber will have an approximate volume of 40 cu.

Basically a rectangle, the dimensions of the chamber are purposely "out of square" - no dimension of the chamber matches another and no angle of the wall is repeated.

"It was designed this way to give a maximum random reflection of sound waves." Mr. Remaley said. "The walls will be made of 1" thick aluminum, one of the best materials to reflect the sound energy.'

Components undergoing tests in this chamber will be subjected to millions of vibrations of varying intensity and duration.

Super Loudspeakers Electro dynamic audio driver

units ("super loudspeakers") located in the walls of the chamber will furnish the sound energy. The sound can be maintained for hours

When the building in Area III is finished, the chamber and control equipment will be moved to its permanent location.

In Phase II, the Plane Wave tube will provide a means of creating a flat front of sound waves moving through test units in a straight line. Modulated air stream loudspeakers will be used to electronically control air flow. Two 800 hp compressors will provide the air stream. Some 800,000 watts of energy will be transferred to the test unit in the form of sinusoidal or random vibration waves.

Phase I will be completed within 130 days after the contractor receives notice to proceed.



IBM 705 Electronic Data Processing Machine in the northeast corner of Bldg. 880 will be open Family Day. Shown are Tom Fox (front), Martin Snyderman (left rear) and Jim Burgess, all 4750.

Service Anniversaries on Family Day . . .





KEY CHAIN MEDALLIONS, turned out in Sandia's Printed Circuits Shop, are given final inspection by Robert Higley (4233-3) and (right) his supervisor, N. A. Cordova. Punch press cut out emblems.



Because employees know no one can do the safety job for you. Statistics show that carelessness, lack of consideration for others, an irresponsible outlook, failure to observe common safety rules and just plain lack of thought lie behind almost every accident.

The invitation for the L ily Day Tour was extended by Dr. Edward Teller, Director of the Laboratory at Livermore.

Located east of Livermore in the Altamont Hills, Site 300 is administered by the Lawrence Radiation Laboratory for the AEC. By agreement with LRL, Sandia arranged to use a small portion of the 10square mile area for explosive tests. None of the explosive tests conducted by either laboratory at the site involve nuclear materials.

G. J. Simmons Speaks To Regional Meeting Of Mathematics Ass'n

Gus J. Simmons (5243) was one of five men from Albuquerque presenting technical papers before the American Mathematical Association's Southwestern Regional meeting April 10 and 11.

The meeting was held at Arizona State College in Tempe.

Mr. Simmons' paper was entitled "A Theoretical Analysis of the Error in Hyperbolic Positioning Systems."

ROBERT LITTLE (1462) (L), who celebrates his 10th anniversary with Sandia tomorrow gets a tie pin from L. A. Hopkins, Jr. (1400).



ALSO CELEBRATING 10 years of service with Sandia Corporation tomorrow is H. H. Dancy Jr. (2722) (R). "Hy" and L. E. Lamkin (2700) are admiring the tie clasp which was his choice of jewelry.

Service Awards

Ten Year Pins



Carlos M. Ortega Joe L. Sanchez 2721 4573 Apr. 7, 1949 Apr. 6, 1949



Arnold E. Bentz Henry H. Dancy, Jr. 5213 2722 Apr. 12, 1949 Apr. 18, 1949



Maxwell B. Miller 4514 Apr. 21, 1949 Robert B. Little 1462 Apr. 18, 1949

Five Year Pins Apr. 18-May 1

Apr. 18-May 1 George R. Norris, Jr. 1222, Lawrence J. Bowen 4254, Alice M. Simon 4431, William H. Puder 4723, Margaret Armijo 4761, Hugh L. Smith 4231. Russell E. Merrell 2731, Emma S. Mora 5321, F. S. MacDonald 4842, Raymond W. Snyder 4574, Henry L. Holmberg 5512, Frank E. Chavez 4135.

Two Year Certificates

April 18-24 April 18-24 Daisy E. Chaves 4623, Evelyn L. Hughes 4623, Viola M. Quirk 4132, James F. Wolfe 4513, Rosendo B. Lopez 4764, Santiago J. Abeyta 4572, Robert W. Hall 4762. Joyce V. Johnson 4152, F. A. Henderson 4423, John M. Hueter 4714, Gladys M. Collins 4623, Orvis E. Pigg 1284, Barbara R. Morgan 4212, C. F. Wilson, Jr. 5216.

IRE Seventh Region Conference to Draw Large Attendance

Sandia Laboratory will be represented by more than 19 staff members on the various committees when the Institute of Radio Engineers hold their Seventh Region Conference at the Western Skies and Johnson Gymnasium May 6-8.

Sandia's engineers have helped make arrangements for conference facilities, in inviting technical papers and in planning the publicity campaign to attract out-oftown visitors.

Those participating on the Conference committees are: G. A. Fowler (5000); H. H. Patterson (5250); J. H. Findlay (5500); T. W. Church (1410); J. P. Shoup (1265); R. D. Kelly (1413); R. C. Spence (5223); M. L. Kramm (5232); W. D. LaCoss (1265); A. B. Church (1265); S. A. Bliss, Jr. (2542); G. A. Arnot, Jr. (1456); Max Weber (5121); J. L. Todd, Jr. (1265); J. E. Green (1411); B. J. Weston (5223); W. J. Barlow (1411), and T. V. Harroun (1411).

The Seventh Region Conference committee announces that response from members in the 12 westernmost states is beyond expectation. Tickets for the luncheon, cocktail party, women's tour to Santa Fe and field trip to Sandia Laboratory's Area 3 are expected to become scarce well before the Conference dates.

James H. Nutt 4411, Kenneth A. Peters 2243, John R. Russell 2251, Joseph R. Ashcraft 5242, Virginia L. Dewitt 4623, George F. Romero 5512, Miramon L. Armijo 4574. Mary K. Hamner 4314, Eleanor R. Kelly 4651, G. Elizabeth Pleus 4623, John E. Healey 8122, Adan Ramirez 4574, Abelicio Molina 4574, Robert H. Eidson 4514.

Apr. 25-May 1

Apr. 23-May 1 John C. L. Leslie 4731, F. B. Arensdorf 4762, Dixie D. Cain 4762, Mary H. Hall 5243, Maxine F. Buchanan 4623, Carol A. Beatrice 2562, Clora M. Fuller 4413. Frank W. Oswalt 5542, Arlen R. Baldwin 2711, John M. Lewis 1474, N. C. Widenhoefer 1455, James H. McCutcheon 1473, Wayne T. Corbett 1451, Walter E. Scott 4424. R. C. Schreiner 4151, Robert W. Eckhoff 1264, Louis Perez 2251, E. Susan Gonzales 4752, Philip E. Eyer 4424, Rex D. Myers 1263, W. R. Foulkes, Jr. 5551.

Promotions

<text>

Supervisory Lateral Transfers

Supervisory Lateral Transfers J. E. McGovern from 4210 to 4310 R. E. Hepplewhite from 4580 to 4210 S. S. Harris from 4760 to 4580 H. W. Maglidt from 4110 to 4760 J. W. Hook from 4710 to 4110 D. L. Hayes from 5322-1 to 5323-2 I. B. DeSaulniers from 5323-2 to 5322-1 A. L. Pearson from 4581-1 to 8222-2 A. J. Derby from 4232-2 to 8211-1 Carl Gregory from 2622-1 to 2621-1 J. B. Jordan from 2641-3 to 2622-1 C. E. Dahl from 2541-2 to 2562-2 L. B. Hobbs from 2543-3 to 2541-2 W. R. Rosenburg from 4330 to 2220 U. R. Neibel from 5530 to 4340 W. R. Rosenburg from 4230-1 to 2430-J. H. Lindell from 5532-2 to 5334-3 F. H. Long from 4252-1 to 4251-2 R. E. Herbert from 4251-2 to 4254-1 J. R. Bell from 555-2 to 4330 J. H. Lindell from 5532-2 to 5535-3 H. E. Payne from 422-1 to 4251-2 R. E. Herbert from 422-1 to 4251-2 C. C. Fornero from 5532 to 4573-3 H. E. Payne from 4221-2 to 4224-2 C. C. Fornero from 5532 to 4653 H. E. Walker from 5511-2 to 1592-2 H. E. Walker from 5511-2 to 1592-2

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SANDIA LAB NEWS

PAGE SEVEN



COLLECTION OF SAFETY AWARDS earned by Sandia Corporation employees is admired by John S. Keller (5254-1). John has maintained a perfect safety record in his more than 15 years with Sandia in the Field Test organization. The plaques were presented by the United States AEC and the National Safety Council.

Record Compiled During Last Year Earns Sandia 13th Safety Award

Sandia Corporation this week received its eighth Award of Honor from the National Safety Council. The award is for Sandia's outstanding safety record in 1958.

Prior to this award Sandia has received five bronze plaque awards from the U.S. Atomic Energy Commission.

Sandia's 1958 frequency rate for disabling injuries per million employee hours worked was 1.3. The severity rate was 99 days lost or charged to disability due to injuries per million employee-hours worked. These rates are 82 per cent and 79 per cent lower, respectively, than the national average accident rates of industries performing comparable work.

They are also lower by 33 1/3 per cent and 41 per cent, than the average rates of AEC contractors engaged in similar work.

A. Burton Metzger, manager of the Safety Engineering Department, in commenting on the achievement, told the Sandia Lab News, "Our accomplishment of earning 13 safety awards in the past nine years is due to the interest is safety shown by all Sandia Corporation personnel. While it is gratifying to receive this form of recognition, the greatest satisfaction comes from the fact that it represents the successful combination of the Corporation's interest in the safety of its employees and the wholehearted cooperation of all employees."

SHOPPING CENTER

SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday.

RULES

- Limit: 20 words
- One ad per issue per person Must be submitted in writing 2.
- 3. Use home telephone numbers
- For Sandia Corporation and AEC employees only 5.
- No commercial ads, please 6.
- 7. Include name and organization.

FOR SALE

WASHER, Easy Spin Dri, \$15. Drew, AL 6-2752.

CUTE PUPS, black and white, 6 weeks old, \$5 each; patio awning, 30 x 5 ft., \$20; two speed 28/33 RPM record changer, \$15. Minnear, DI 4-5419.

POWER MOWER, 21" Excello, 4 cycle, Briggs and Stratton, \$59, Hook, AM 8-0291.

CHROME DINETTE set with four chairs, \$30; golf cart, bag, woods, irons, put-ter, leather head covers, traveling hood, \$135, Scott AX 9-4065 after 5:30.

GARAGE DOOR, overhead style with all hardware. First reasonable offer accep-Adams, DI 4-8274.

COLLECTORS ITEMS, Pedestal china, an-tique stove and lamps. Reinertsen, AL 5-1954 after 5 p.m.

SHOPPING CENTER

HOLLYWOOD BED, plastic headboard, \$25; bathinette, \$4; combination baby swing and car seat, \$4; youth bed, mattress, \$32.50. Gustafson, DI 4-6529.

FEMALE PUP, 8 weeks old, ½ miniature poolle, ½ fence jumper, she loves my kids. \$5 quick before they fall for her. Bray, AL 6-9257.

BABY CARRIAGE, Thayer, year old, plaid, \$15; baby jump seat, \$5; baby walker, \$4; mahogany bureau w/mirror, \$25. Gregory, AL 6-5779.

3 BRM HOME and den, 2 car carport, w/w carpeting, drapes, near schools and shopping center, \$1500 down. Clement, AX 9-6552.

 '57 GOLIATH stationwagon, red. Edwards, AX 9-5496, 9100 Woodland Ave. NE. AX 9-5496, 9100 Woodland Ave. NE. '56 MERCURY Montclair, 2-door, Merc-O-Matic, power brakes, power steering, R&H, tutone, white wall tires, low mileage, one owner. Daut, AL 5-2529. CHROME HIGH CHAIR, \$10; folding gate, \$1.50; boby bed w/mattress and 5-drawer chest, \$35; Benedict, AL 5-0234 after 5:30 p.m. DOUBLE BED aray-finished ark w/foom

atter 5:30 p.m. DOUBLE BED, grey-finished, ash, w/foam rubber mattress and box springs, \$100; Stauffer Posture table, \$150. Senn, AL 5-3109 after 5 or weekends.

Solov drile of weekinds.
 ST ENCYCLOPEDIA Americana, \$150. Brewster, AL 5-9177, 530 Texas SE.
 SWING SET, child's, \$10; Maytag wringer washer w/pump, \$40; rollaway bed w/mattress, \$12.50; girls bicycle, 26", \$5 Woollbert 40, 5 5033

NEXT DEADLINE FOR SHOPPING CENTER ADS Friday Noon, April 24

SHOPPING CENTER

'53 BUICK Super, hardtop, R&H, US Royals, \$500; '51 Studebaker Commander V-8, straight transmission, overdrive, \$150. Bell, CH 2-2774 after 5 p.m.

ALUMINUM BOAT, 14 ft. Lone Star, safety float tanks, 7½ hp Martin motor, \$320; folding camp trailer, opens to 14' x 8', \$90. Buchanan, AX 9-7251.

EASTERLING CHINA, service for 6, Rad-iance pattern, \$150; Boston screw-tail dog, about 1 yr. old, female, \$25. Keller, AL 5-9805 after 5:30.

5:30

woods, nine irons, tapered steel long shafts, wood socks, canvas compartmented bag. Hurley, AX 9-3390.

'56 LINCOLN Premier hard top coupe, complete power accessories and factory air conditioning, \$2,250, will consider trade. Roy, AL 6-2773 after 5:30.

SHOPPING CENTER

'57 FORD, 4-dr. Custom 300; '50 Plymouth. 2-dr. station wagon; Aloha camping trailer, sleeps 6. Reeder, AX 9-5944.

TRAILER, 2 wheel, 6 x 6, lights, spare, steel rack \$75; 1 hp 115 v electric motor, \$25; '53 Cadillac 62, fordor, PS, hydra, Radio motor completely rebuilt. Hueter, CH 2-1620.

WASHING MACHINE, 1956 Norge automatic, needs work in transmission, sell to highest bidder. Danclovic, AL 5-4927.

CUTBOARD MOTOR, 11/2 hp Evinrude. Ideal for light fishing boat, \$35. Al-berts. Ext. 37298.

COLT 45 Service, double action revolver and Tru-Line, Jr. dies, \$65; daybed couch makes into bed, \$50. Tanner, AL 5-8587.

'54 MUSTANG scooter, Fjelsted, 3017B 31st Place, Ext. 23278.

'53 FORD ranch wagon, two tone, over-drive, original owner. Will trade for ½ ton pickup. Morehouse, AX 9-0028.

3 BRM MOSSMAN, 1³/₄ baths, pitched roof, h/w floors, carpeting, drapes, forced air furnace, patio, large walled lot. 4¹/₂% loan. Goebel, 2929 Cuervo Dr. NE. AUTOMATIC WASHER, Bendix Economat, \$70. Kindel, DI 4-1554.

GOLF CLUBS, set 4 matched woods, Louis-ville Slugger, \$20. Smith, AM 8-1349.
'49 CHEVROLET 4-dr. sedan, \$149; 21" Admiral table model TV, \$59. Mason, AX 9-2836.

FLY FISHING rod and reel, must be reasonable. Burns, CH 7-9372 after 6 p.m.

UPRIGHT FREEZER, 18 cu. ft. Maytag, \$150. Serna, AM 8-8084. WHEEL TRAILER w/lights, \$60; 16 gauge single shot shotgun, \$20, will sell or trade for tent. Scranton, AX 9-4902. '57 CHEVROLET, Bel Air, 4-door hardtop, factory installed air conditioning, turbo-glide, power steering, R&H. Villanueva, 2209 Milton Ct. NW, CH 3-8788. UPRIGHT PIANO. \$200 or best offer

2209 Milton Ct. NW, CH 3-8788.
 UPRIGHT PIANO, \$200 or best offer. Spencer, 8116 San Jaaquin SE.
 EQUITY IN 1957 45' x 8' wide Dreamhome Mobile Home. Jack, DI 4-0411.

WANTED

LIVING ROOM CHAIR, barrel back, wing back or Lawson style. Lambert, AL 6-2043.

SADDLE HORSE, reasonably gentle, about \$100. Tatum, CH 2-9021 evenings and weekends.

POOL TABLE, standard size, 4½ x 9 feet. Roybal, AL 6-6981.

ONE WHEEL TRAILER, wood body. Roberts, AL 5-9527. FOUR SLEEPING bags and 4 air mattresses (not plastic). Puder, Ext. 35143.

CHILD CARE in my home. Colclough, 8908 Shoshone Rd, NE. WOOD TURNING lathe, used, condition not important, price is. Colp. AM 8-8035.

SPINNING ROD and reel, in good condition and reasonable. Leonard, AX 9-4684 after 5:

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EASY SPIN drier; 16" sink and mixer faucets, \$35. Barrett, AX 9-7284 after

GOLF CLUBS, Springfield matched, three

HAND LAWNMOWER; Kenmore wash-ing machine, wringer type. Gonzales, AL 6-6728 anytime.

'56 CADILLAC, sedan De Ville, radio, heater, air cond., all power equipment, one owner, 16,000 miles. Maxon, AL 5-3134.

'57 FORD Customline 300; factory air con-ditioned, Fordomatic, radio and heater, \$1495. Syme, AX 9-4100.

BABY CARRIAGE, Storkline, half price, \$20. Haycraft, AX 9-3220.

3 BRM BRICK home, 13/4 baths, sprinklers, landscaped with large back patio, car-pets throughout, \$16,500. Valdez, AM pets throughout, \$16,500 8-1004, 1020 Kentucky SE.

ELECTRIC RANGE, Admiral 30" automatic, extra large oven and rotisserie, 3 years old, \$100. Strome, 1811 Lafayette Dr. NE, AL 6-3469 or AL 6-1779.

48 GMC 1/2 ton pickup, 4 speed, new tires, insulated camper, \$225; '57 Pontiac hardtop, \$1795; or trade both for '59 pickup. McDonald, 2625 Indiana NE, AL 6-5041.

GERMAN CAMERA, Retina II, 35 mm, with f/2.8 lens, rangefinder, Kolart flash gun, \$65. Adent, AX 9-1905 after 5 p.m.

'50 CHEVROLET coupe, 5 passenger, R&H, leather upholstery, will take trade. Cor-dova, AX 9-1252.

ELECTRIC RANGE, deluxe Hotpoint; Ham-ilton-Beach electric mixer; 3 chrome kitchen chairs. Lowe, 11404 Bellamah NE.

ELECTRIC REFRIGERATOR, 12 cu. ft., sep-arate freezing compartment, \$95. Marsh, CH 3-2767.

'58 CHEVROLET Delray, 6 cyl., powerglide, R&H, 5500 miles, \$1700. Keck, AL 5-6823. AL

'56 CHRYSLER Windsor, 2-dr. hard top, power steering, auto. trans., 27,000 miles, below book. Roth, CH 3-0522.

'54 FORD 6 with overdrive, R&H, a real economy car. Sylvester, AL 6-0404 after 5:30.

*57 CHRYSLER Saratoga, white, 2-dr. hardtop, PS, PB, R&H, air conditioning, other extras. Original cost \$5200, yours for \$2400. Bear, Ext. 22132.

AL 5-5033. \$5 Woellhart,

23 BRM HOUSE, hardwood floors, fireplace, ½basement, near Fatima church, \$65 monthly w/ substantial downpayment or FHA refinancing. Torres, AL 6-6600, 3817 Mackland Dr. NE. \$65

JIG SAW, stand and motor, \$25; small air conditioner, \$20. Austin, AL 6-3079.

3 BRM HOME, close to Bases, schools and shopping centers, walled and landscaped, new FHA, 705 Florida SE. Roehrig, AL -4500.

TWIN HEADBOARDS, two blond modern end tables; chrome dinette set with four chairs; ladies shae skates (roller), size 71/2. Williams, AL 5-7934.

24" BICYCLE, boys, Higgins, made in Germany, \$25. 24" girls bicycle, will trade for 26" girls bike. Wagner, AX 9-2347.

CLOTHESLINE POLES and cable, \$10; Crosley automatic washer, motor needs rewindina, \$50; bookcase headboard, \$3; vanity, \$10. Allen, AX 9-6589.

'57 BUICK, 4-door hardtop, R-H, air con-ditioned, one owner, see to appreciate. McClelland, AL 5-0020 before 5, AL 5-8842 after 5,

56 OLDS, super 88, 4-door hardtop, power ering and brakes, jet-away transmis-30,000 miles, will trade. Dyer, AX steering sion, 3 9-2142

2 BRM HOME, hardwood floors, attached garage, furnished, low down payment, or will rent for \$90 per month, immediate possession. Pons, AL 5-2990.

DINETTE SET, grey w/4 chairs, \$18. Simonson, AX 9-5663, 11612 Rosemont NE

TRANSMITTER: 60 watt A. M. phone, coils for 10 M., \$50; panodapter, 455 KC, \$35; trade arc 4 for mobile whip and spring base. Scussel, AX 9-7821.

GAS RANGE. Magic Chef, 4 burner. Davis, AL 6-1489.

CAMERA, Mercury 11, will sell or trade for old guns. Peters, 1023 Grace NE, AX 9-4327 after 5.

BIRD CAGE, wrought iron, with stand and everything but the bird. 10 watt Grom-mes new amplifier. Richardson, 11512 Love Ave. NE, AX 9-3673 after 5:30.

'54 FORD tudor, '55 power-pack engine, OD, PB, power seat, extensively cus-tomized inside and out. Kown, Ext. 21147, Men's Dorm.

'56 OLDS 88, radio, heater and hydramatic, 7,600 actual mileage, \$1495. Pasko, AX 9-6542.

4 CYLINDER Hercules 300 engine w/Cros-ley rear-end and transmission and drive shaft, dual manifold, brand new. Herring, AX 9-7207.

POWER HAND SAW, 6" Craftsman, \$22; 1/2 hp motor, \$8. Pitti, AL 6-1629.

GOLD DAMASK draperies, one pair, lined and inter-lined, 56" wide, 104" long, deep swag valance, \$30. Blake, AM 8-3267. WINDOW FAN, 20" 3-speed reversible, \$20. Comstock, AX 9-6051.

KITCHEN TABLE, 4 chairs, \$25. Brown, AX 9-5405.

'52 JAGUAR Roadster XK120, \$1095. Shea, AL 5-8092.

A.T.R., 12v DC to 117v AC, \$52.50 value, sell for \$30, used very little. White, AL 6-9408.

MAPLE END TABLES, 2, \$12 each, cof-fee table, \$20; Lionel train, \$20; Auto-matic Washer, \$25; dual casement win-dow fan, \$20, mirror, \$5. McKay, AL 5-9779

SPIN REEL, Pflueger No. 1000, List \$14.95, sell for \$7.50, want to buy cement mixer. Toya, DI 4-2775.

RENAULT Daulphine 1957, two tone onable. Edwards, 8905 Shoshone Rd. NE. WASHER, Easy Spindrier, used 21/2 years, \$45. Graeber, Ext. 48276.

ENGAGEMENT RING, 1/2 carat blue-white diamond, yellow gold setting, \$350; 30 vol. Encyclopedia Americana, 1958 edition, \$300. Both for \$600. Stea, Ext. 25292.
 \$50 FORD Custom 2 dr., R&H, good be original owner selling for \$135. Parse AX 9-0400.

ARIZONA HIGHWAY and New Mexico magazine back issues. Mrs. Jones, AL 5-3390, 608 Richmond SE.

GAS RANGE, Kenmore 42", fully auto-matic grill, glass oven door. Amador, AM 8-0068.

ARCTIC CIRCLE 2-speed 4000 cfm window type cooler, complete with accessories and mounting brackets, \$140. Komen, Ext. 46288.

POODLE, silver-beige, AKC registered, 6 months, \$100. Wilson, Ext. 42242.

TYPEWRITER, Royal portable, \$43.77, will haggle. O'Neill, AL 5-6355.

naggie. O'Neill, AL 5-6355.
 '57 CHEVROLET 210 fordor, factory air, radio, book price \$1850, sell for \$1475 cash. Villella, AL 6-1881.
 FENDER SKIRTS for '56 Chevrolet \$5; Edsel Spinner hub caps \$20. Tichenor, AL 5-5183.

HOTPOINT AUTOMATIC washing machine, \$50. Holmes, 5811 Bellamah Ave. NE, AM 8-8203.

HOLLYWOOD BED, full size, complete, \$35; RCA radio-phono comb., floor model, en-closed record storage, mahogany, \$37.50; patio steel glider, \$5; 3-way floor lamp, \$4. Davies, AX 9-2115.

3 BRM ROBERSON, den, large walled lot, ideal for children, sprinklers, cooler, 13/4 bath, covered patio, \$1700 down to FHA. DeLollis, AX 9-5384.

FOR RENT

MOUNTAIN CABIN, year-round, furnished, modern, on North Highway 10, one bed-room, 25 minutes from Sandia, utilities paid, \$80 monthly. Miller, Ext. 33138. utilities

BOARD AND ROOM located between Con-stitution and Sumner off Wyoming. Storms, AX 9-0317 for details after 5 p.m.

LOST AND FOUND

LOST—Grey cap, silver dangle earring, tan wallet w/\$155 and ID of J. W. Daggett, gold tie clasp, auto keys, chrome cross gold tie w/black band, turguoise and gold tie clasp, auto keys, chrome pencil top w/black band, turquoise copper earring, connector in plastic brown leather pocket pencil holder w cils. LOST AND FOUND, Ext. 26149. w/pen-

FOUND—A&M College ring, class of '49, Ford key, Swank tie chain, orange-brown rim sunglasses, clip-on sunglasses in clasp D.O. Elliott, South Bend, Ind., black leather tobacco pouch made in England with pipe made in Belgium. LOST AND FOUND, Ext. 26149.

REQUEST THE man who left his yellow handled pocketknife in room 45, Bldg. 880 when he brought a Weather Bureau Radiosonde call Meteorological Section 5243-2, Ext. 29234.

LIVERMORE FOR SALE

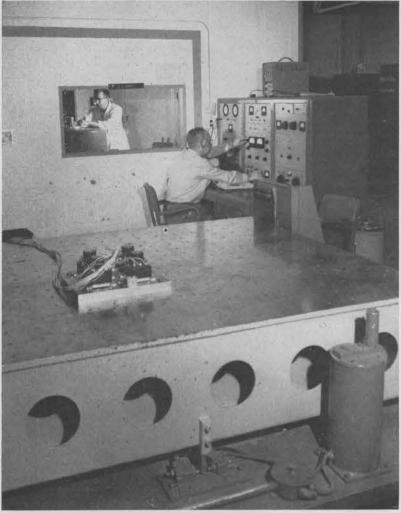
'52 FORD custom deluxe sedan, R&H, Fordomatic, 2 new tires, \$245. Adams, HI 7-4034.

LAWNMOWER, hand-powered, 1 year old, good exercise at a saving, \$12.50. Wil-cox, HI 7-4064.

LIVERMORE FOR RENT

TRAILER, sleeps five, ice box, water, gas stove w/oven, lights and electric brakes, hitch available, \$30 per week. Gregory, hitch availe HI 7-5269.

PAGE EIGHT



VIBRATION FACILITIES in Bldg. 860 will be shown to visitors on Family Day, April 18. Preparing a test on an MB shaker (shown in rear) are Tom Laws and C. E. Bennett, both of 1612. In the foreground a large vibrating Sontag shake table can be seen.

Sandia Family Day

PLEASE COME WHEN YOU ARE EXPECTED

"What's the purpose of the three tour periods? Why not just let people come any time they want to?" Here are the reasons:

1. There will be about 15,000 people in Tech Area I tomorrow—over twice the number for a normal work day. Spacing the arrival times of these visitors will minimize congestion.

2. Certain exhibit areas are in buildings with narrow corridors and very limited demonstration space. Overcrowding as a result of failure to observe rules on arrival times will make it impossible for visitors to see what has been prepared for them and the safety and well-being of children could be endangered in such crowds.

3. Parking lots are adequate to handle the crowds if the tour periods are evenly patronized, as arranged by the ticket division. If these rules are disregarded, time-consuming congestion will result, not to mention frustration. In short—your committee has done everything possible

to plan for your comfort and convenience. Please cooperate by observing the arrival times indicated on your tickets.

Family Day Committee

Tickets Needed To Enter Area

The one thing Sandia Laboratory employees and guests should not forget on Family Day is their tickets which admit them to the Technical Area.

Tickets, in the form of a twopart tag, with a string at the top, should be attached to the outer clothing of all Family Day visitors, including employees, before reaching the Tech Area gates.

The bottom portion of the tag will be collected as a registration when entering the Tech Area, and the top portion must be worn by everyone while in the Tech Area. It may be retained as a souvenir. Employees should also wear their Tech Area badge in addition to the ticket while escorting their families.

If a visitor has to leave the Area temporarily, he must be accompanied through the gate by the employee whose name is on his ticket, both when leaving and returning.

There are several reasons for using the tickets. It acts as a registration of visitors, serves as identification and will give an accurate total of people attending Family Day.

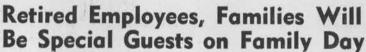
It also complies closely with everyday procedures which are followed by Sandia Corporation employees coming in and out of the Tech Area. The different color tickets denote tour periods.

Emergency ticket issuing headquarters tomorrow will be located off the lobby of Bldg. 800 . . . just in case!

ASTE Members to Meet Friday, Apr. 24

A dinner meeting of the Albuquerque Chapter of the American Society of Tool Engineers will be held Friday, April 24, beginning at 7 p.m. at Leonard's Restaurant.

The program will be sponsored by the Sheffield Gauge Corporation of Worchester, Mass., and will consist of a lecture and movie.



Special invitations for Family Day have been sent to retired employees of Sandia Corporation who didn't previously have an opportunity to show their immediate families where they worked.

In many cases there have been facilities added at the Laboratory since the employee's retirement.

These former Sandians number about 85 and the majority of them have chosen to continue residing in Albuquerque.

A special reception center for Sandia retirees will be set up at



COORDINATOR of Sandia Family Day, Marv Sektnan (4731), ties a guest tag on his pretty wife Phyllis in preparation for the big tour which gets underway tomorrow morning, April 18th.

Is It Superman? No It's Sektnan – Family Day Coordinator – In Action

Dashing through the Tech Area lugging a heavy briefcase . . . pedaling furiously on a bicycle . . . handling two telephone calls at once . . . these phrases describe one of the busiest men involved in the Sandia Family Day arrangements.

Marv Sektnan (4731), coordinator for Sandia Family Day, points to the hole in his shoe and smiles, "I've been around."

As Family Day coordinator Marv has attended dozens of committee meetings, checked a hundred details, written reports, proposals and employee bulletins and talked with numerous Sandians throughout the Laboratory.

Marv came to Sandia in August 1958 and first worked as a personnel representative in Skills Inventory Section 4652-3. In December he was given a special assignment to research plant tours in industry and formulate a plan for Sandia Family Day.

the south end of the lobby of Bldg.

800. Hostesses at the door of Bldg.

800 will direct these former em-

ployees to the center where they

will be greeted by members of the

Services and Benefits organiza-

Similar invitations for Family

Day were sent to employees on

leaves of absence who may not

otherwise have been aware that

they, too, could participate in the

informal tour of unclassified fa-

cilities in Tech Area I.

tion and be invited to register.

"I spent much of my time in the library for a while," Marv says, "and accumulated quite a stack of material."

From this, Marv outlined the operating procedures of successful industrial plant tours and prepared a general plan of attack including main committees and their duties.

At this time he was on loan to the Public Relations Division 4731 and the transfer to the division became permanent last month.

Marv earned his Bachelor's degree in International Relations from the University of Minnesota in 1957. He attended the American Institute for Foreign Trade in Phoenix the following year and received another BA degree in this field.

Aeronautical Sciences Section to Meet Tuesday, April 28

New Mexico Section of the Institute of Aeronautical Sciences will meet Tuesday, April 28, at Leonards Restaurant.

Speaker will be Dr. Knox Millsaps, Chief Scientist, Air Force Missile Development Center, Holloman Air Force Base. He will discuss "The New Department of Defense Solar Furnace."

The meeting will begin at 6 p.m. with a social hour. Anyone interested in the advancement of the aero-sciences is urged to attend. Reservations are available from Bill Keeler (4282), ext. 20147.



WINNING "HAND" for Sandia Family Day is attractively posed by hostess Nora Johnson (4623 assigned to 1541). The large tour arrow in the "card" at left will point the way for visitors through major exhibit buildings. The Thunderbird arm band in the second photo will identify hosts, hostesses, guides and lecturers for Family Day activities. In the center shot Nora displays the Family Day tags that will be worn by all visitors inside the area. Souvenir key chain and Thunderbird medallion are displayed in the next panel and the tour guide booklet is shown in the last photo. All of the items displayed here were designed as aids for Sandia Family Day activities.